Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion	)	GN Docket No. 18-238

COMMENTS OF
NTCA–THE RURAL BROADBAND ASSOCIATION

I. INTRODUCTION

NTCA–The Rural Broadband Association ("NTCA")[1] hereby submits these comments in response to the Fourteenth Broadband Deployment Report Notice of Inquiry released by the Federal Communications Commission (the "Commission").[2] Consistent with Congress' directive, the Commission seeks comment in the NOI regarding whether "advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion."[3] As described more fully below, NTCA encourages the Commission to evaluate the state of deployment according to what services have already been deployed and that are used to provide "high-quality

[1] NTCA represents nearly 850 independent, community-based telecommunications companies and cooperatives and more than 400 other firms that support or are themselves engaged in the provision of communications services in the most rural portions of America. All of NTCA's service provider members are full service rural local exchange carriers and broadband providers.

[2] *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Fourteenth Broadband Deployment Report Notice of Inquiry, GN Docket No. 18-238, FCC 18-119 (rel. Aug. 9, 2018) ("NOI").

[3] *Id*. at ¶ 1, citing 47 U.S.C. §1302(b).

voice, data, graphics, and video telecommunications."[4] More specifically, the Commission should affirm its conclusion in the 2018 Broadband Deployment Report that mobile services, while providing significant value of their own and essential for many uses, are not currently a substitute for fixed services.[5] This is especially true in rural areas where mobile connections are impacted significantly by terrain and distance, in addition to the evolution of speed and other performance demands prevalent regardless of location.

II. ACCESS TO ROBUST AND RELIABLE FIXED AND MOBILE BROADBAND INTERNET ACCESS FOR EVERY AMERICAN CONSUMER SHOULD BE THE COMMISSION'S GOAL IN THIS PROCEEDING

Congress' Section 706 mandate requires the Commission to do more than simply report on the mere availability of *some* form of broadband Internet access. For instance, mobile wireless broadband service, while clearly valuable in its own right to consumers of all kinds, is not a substitute for a robust, high-quality, fixed wireline connection that so many urban consumers take for granted. Indeed, while technical and practical limitations that differentiate mobile wireless service may in theory some day be resolved and overcome, the Commission must base its report on "the current state of deployment."[6]

In rural areas particularly, spotty access to a mobile wireless broadband connection with potentially stringent usage limitations can hardly be viewed as "advanced" in terms of enabling consumers to "originate and receive high-quality voice, data, graphics, and video

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4 *See* 47 U.S.C. § 1302(d)(1).

5 *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 17-199, *2018 Broadband Deployment Report*, 33 FCC Rcd 1660, 1666 (2018).

6 NOI at ¶ 6.

telecommunications." Even if faster speeds become available and coverage more reliable, the increased number of consumers relying on mobile services is likely to place a strain on shared capacity wireless networks, thus limiting consumers' ability to utilize the "advanced" services that many consumers were expecting and that Americans with access to fixed connections can enjoy today.[7] Furthermore, mobile services do not allow for certain uses, or at least not as easily, that are necessary in today's digital world. As the State of Michigan concluded, for instance, "[t]he type of device can … have a major impact on the individual's ability to use the internet in a meaningful way; while a smartphone is useful for communication or social media, it is not ideal for filling out a job application, doing homework, or working from home."[8] Furthermore, while the current trend toward unlimited data plans by mobile wireless carriers is a positive development for many consumers, such plans often result in providers having to limit data usage to ensure sufficient capacity for all users.[9]

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[7] *See, e.g.*, "Fiber broadband: Is it a waste with 5G and Elon Musk's satellites on the horizon?," Jason Hiner, ZDNet (Feb. 5, 2017), available at https://www.zdnet.com/article/fiber-broadband-is-it-a-waste-with-5g-and-elon-musks-satellites-on-the-horizon/ ("Top notch fiber connections have much lower latency than any other type of connection…. That opens up new possibilities for telepresence, team collaboration, and virtual reality and augmented reality over the internet. The other big advantage to fiber over wireless, satellites, power lines, or upgraded cable lines is that it's much more future-proof. While we're racing toward 1 gigabit speeds by 2020, by 2025-2030 we're going to be demanding 10 gigabits. Fiber will find it much easier to scale up to meet that demand than these other types of connections will.").

[8] Michigan Broadband Roadmap, August 2018, at p. 33, available at https://www.michigan.gov/documents/snyder/MCAN_final_report_629873_7.pdf (last visited Sep. 4, 2018).

[9] *See, e.g.,* Data usage support, Network facts ("With so many devices using mobile data around the world, the demands on networks can sometimes strain resources. … For AT&T Unlimited … slower speeds due to network congestion can happen at any time."), available at https://www.att.com/support/wireless/data-usage.html (last visited Sep. 5, 2018); *See also*, As

Wireless Internet service also is not an adequate substitute for fixed broadband service in certain locations due to terrain, weather conditions, power levels and distance from transmitting equipment.[10] While wireless technologies represent a useful and necessary method of bringing broadband service to areas where a business case for other technologies is more difficult and costly, even in those instances the wireless transmission must connect relatively quickly to a fiber network in the network topology so that consumers are not dependent solely on the limited and shared capacity of spectrum beyond certain access points.

The availability of broadband Internet access service can have many transformational effects on a community. Perhaps most important is the ability of a connected community to be a draw for new employers and for residents to have more job opportunities. Businesses simply cannot operate in today's modern economy absent a robust, high-speed broadband connection. It is thus with good reason that Congress' Section 706 inquiry is not limited to residential use; the statutory text expressly includes "elementary and secondary schools and classrooms" in the analysis, and to the extent that the economic development benefits of broadband are believed to be important, access by businesses large and small must also be a

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California firefighters battled the state's largest wildfire, Verizon throttled their data, by David Williams, Aug. 22, 2018, available at https://money.cnn.com/2018/08/22/technology/verizon-firefighter-data-throttled/index.html (last visited Aug. 28, 2018).

[10] *See, e.g.*, Comments of Electronic Frontier Foundation, GN Docket No. 18-231, filed Aug. 17, 2018 at p. 3. *See also*, Letter from Jerry Morris, President, Laurel Ridge Property Owner's Ass'n, to Chairman Ajit Pai, GN Docket No. 18-231, dated Aug. 17, 2018 ("Some [county] residents can receive fairly robust service … from … a Wireless Internet Service Provider. However, because of the [Laurel Ridge] community's location between two mountain ridges, many residents cannot obtain reliable service from [the Wireless Internet Service Provider].")

logical part of the consideration. There are likely few, if any, businesses that do (or could) rely solely upon mobile broadband access and would view it as an acceptable "substitute" for fixed broadband services. Indeed, even as a lack of mobile data coverage can frustrate users seeking a signal, "mobile-only" communities are unlikely to be much of a draw to employers.[11] Instead, the employers will likely choose a community in the next county or the next state that has robust, wireline broadband infrastructure in place. In this regard, the Commission's decisions in this proceeding can have much larger implications than whether a rural consumer can stream video on a smart TV versus a smartphone.

III. THE COMMISSION SHOULD FOCUS ON EXISTING CAPABILITIES AND SPEED INSTEAD OF HYPOTHETICALS

The Commission noted in the NOI that the 2018 Broadband Deployment Report concluded "speeds *appear to be*" and "minimum speeds *will likely* increase over time," and requested comment on whether to conduct a similar evaluation in the next report.[12] Additionally, the Commission requested comment on whether mobile and fixed services should be considered substitutes "to the extent that mobile services are able to offer equivalent functionality as fixed services *either now or in the future*."[13] Under the specific directives of Section 706, the

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[11] It is worth noting that one of Amazon's requirements for any "work from home" position is "[a] minimum of 10 mbps download and 5 mbps upload speed from a reliable internet provider (Cable, DSL or Fiber Optic/FiOS providers only)." Also notably, Amazon furnishes teleworkers with a laptop. *See* https://www.amazon.jobs/en/jobs/SF180016748/part-time-leadership-and-development-internship-program (last visited Sep. 4, 2018).

[12] NOI at ¶ 9, citing *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All American in a Reasonable and Timely Fashion*, GN Docket No. 17-99, 2018 Broadband Deployment Report, 33 FCC Rcd 1660, 1673-74 at ¶ 34 (2018) ("2018 Report") (emphasis added).

[13] NOI at ¶ 11 (emphasis added).

Commission should not speculate "what might be" in assessing whether telecommunications capability is being deployed to all Americans in a reasonable and timely fashion. In fact, the language of Section 706 clearly focuses on what "is" being deployed – not what might be. Furthermore, Congress directed the Commission to prepare an *annual* broadband deployment report; thus, to the extent certain speeds increase or certain services do happen to offer equivalent functionality in the future, that can and should be included in the Commission's annual report if and when it actually happens. To include such services now and to treat them as equivalent does a disservice to Americans who lack reliable broadband service by placing a big bet on a future that may never materialize (or that may materialize only in certain areas but not reliably in others).[14]

The NOI also seeks comment on maintaining the 25 Mbps/3 Mbps benchmark to define "advanced telecommunications capability."[15] NTCA supports this proposal and further recommends incorporating performance metrics beyond speed into the Section 706 analysis that recognize the capabilities of broadband as received by consumers. Specifically, it is important for the Commission to incorporate into its Section 706 inquiry a measure of the *true* performance of certain broadband technologies, considering for example the latency, data usage limits, and other technical capabilities of various offerings. With respect to latency, the Commission must account for the fact that high latency services remain unable to support consumers' use of certain

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14 *See, e.g.*, Comments of Common Cause, *et al*., GN Docket No. 18-231 (filed Aug. 17, 2018) at p. 1 ("Conflating the two services would … distort competition analysis and potentially prevent the Commission or Congress from enacting policies to ensure there is robust broadband competition.").

15 NOI at ¶ 8.

applications.[16] To return, again, to the definition of "advanced telecommunications capability" as enabling "users to originate and receive *high-quality voice*, data, graphics, and video telecommunications using any technology," the plain language of Section 706 should dictate that the Commission include a measure of latency in this proceeding.

Data usage limits should also be a critical part of the Section 706 inquiry. For example, two NTCA members reported that their average fixed broadband data usage by customers was 162 GB and 165 GB, respectively, in May 2017, and by May 2018, the usage had increased to 254 GB and 228 GB. By contrast, while some mobile wireless providers have moved to unlimited data plans, many consumers, particularly on wireless networks, continue to have their speed, and thus quality of service, reduced based on network demands at any given time. Data caps are also a common feature of satellite broadband service.[17] To the extent data caps prevent users from being able "to originate and receive high-quality voice, data, graphics, and video telecommunications," as required by Section 706, the technologies that use them should not be considered "advanced" telecommunications capabilities.

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16 *See* Vantage Point, *Satellite Broadband Remains Inferior to Wireline Broadband*, attachment to Letter from Great Plains Communications and Consolidated Companies to Marlene H. Dortch, FCC, WC Docket No. 10-90 (filed Sep. 5, 2017) at p. 1 ("satellite broadband service continues to be plagued by high latency … this aspect of satellite broadband service significantly degrades or makes unusable many real-time applications, such as voice, emergency notifications, health services and virtual private networks.") The paper also states that "[t]errestrial blockage, periodic solar outages and weather interference are all reliability issues that continue to persist…. As customers increasingly rely on broadband for critical services, such as eHealth, satellite-based services are not able to meet the necessary reliability requirements." *Id*.

17 *Supra*. n. 16 at p. 2 ("All the current data plans offered by Hughes Network Services and ViaSat have capacity thresholds that are substantially less than the average customer's usage.").

To be clear, NTCA recognizes that services with latency and data usage limits can provide other value in the form of mobility or other features that consumers desire despite the limitations of these services noted above. However, given the limitations on capacity and uses as well as the differing nature of the value they may offer, mobile services are clearly complementary to, rather than substitutes for, fixed services, and thus should not be included in the resulting Section 706 Report.

IV. CONCLUSION

Section 706 provides a clear definition of "advanced telecommunications capability." Only those services that meet such a definition – presently, not possibly in the future – should be considered when preparing the resulting report. Anything else would be contrary to Congress' goal in establishing this requirement as the report would inaccurately portray areas as having advanced telecommunications capable of providing the types of services consumers, businesses and employers need.

Respectfully submitted,

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